AIR QUALITY PERMIT

Issued to: Busch Agricultural Resources, Inc.
Sidney Elevator
P.O. Box 966
Sidney, MT 59720

Permit: #3201-00
Complete Application Submitted: 05/21/02
Preliminary Determination Issued: 06/27/02
Department Decision Issued: 07/15/02
Final Permit: 07/31/02
AFS#: 30-083-0016

An air quality permit, with conditions, is hereby granted to the Busch Agricultural Resources, Inc.-Sidney Elevator (BARI), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.701, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

BARI's grain elevator will be located on a 50-acre land parcel approximately 1 mile northeast of Sidney, Montana, and approximately 0.75 miles east of Highway 200. The legal description of the proposed facility is the Northwest ¼ of Section 27, Township 23 North, Range 59 East, in Richland County, Montana.

B. Permitted Equipment

BARI is proposing to install and operate a grain elevator facility to receive, handle, store, and ship grain for local farmers. The facility will have a storage capacity of approximately 500,000 bushels of grain. A complete list of the permitted equipment is included in the permit analysis.

SECTION II: Conditions and Limitations

A. Operational Limitations

1. BARI shall operate and maintain the baghouse pollution control equipment in accordance with manufacturer instructions (ARM 17.8.715).

2. BARI shall not cause or authorize emissions to be discharged into the outdoor atmosphere that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).

3. BARI shall not cause or authorize the use of any street, road, or parking area without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).

4. BARI shall treat all unpaved portions of the haul roads, access roads, and the general plant property with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.3 (ARM 17.8.710).

5. Grain loadout shall not exceed 14,000,000 bushels during any rolling 12-month time period (ARM 17.8.710).

B. Testing Requirements

1. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

2. The Department of Environmental Quality (Department) may require testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. BARI shall supply the Department with annual production information for all emission points, as required by the Department, in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the equipment list contained in the permit analysis.

   Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

2. BARI shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.705(1)(r) that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emissions unit. The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.705(1)(r)(iv) (ARM 17.8.705).

3. BARI shall document, by month, the total process throughput from the truck and/or rail grain loadout. By the 25th of each month, BARI shall total the process throughput from the truck and/or rail grain loadout during the previous 12 months to verify compliance with the limitation in Section II.A.5. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.710).

4. All records compiled in accordance with this permit must be maintained by BARI as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.710).

D. Notification

1. BARI shall provide the Department with written notification within 30 days after commencement of construction of the grain elevator facility (ARM 17.8.710).

2. BARI shall provide the Department with written notification of the actual start-up date of the grain elevator facility within 15 days after the actual start-up (ARM 17.8.710).

3. BARI shall provide the Department with the make, model, type, size, and year of the equipment for the grain elevator facility within 15 days prior to commencement of construction (ARM 17.8.710).

SECTION III: General Conditions

A. Inspection – BARI shall allow the Department's representatives access to the source at all times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

B. Waiver – The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if BARI fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving BARI of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.701, *et seq.* (ARM 17.8.717).

D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq.*, MCA.

E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section. The filing of a request for a hearing postpones the effective date of the Department's decision until the conclusion of the hearing and issuance of a final decision by the Board.

F. Permit Inspection – As required by ARM 17.8.716, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.

G. Construction Commencement – Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked.

H. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by BARI may be grounds for revocation of this permit, as required by that Section and rules adopted thereunder by the Board.

PERMIT ANALYSIS
Busch Agricultural Resources, Inc.
Sidney Elevator
Permit #3201-00

I. Introduction/Process Description

A. Permitted Equipment

Busch Agricultural Resources, Inc. (BARI) is proposing to construct and operate a Greenfield grain elevator facility. BARI's grain elevator will be located on a 50-acre land parcel approximately 1 mile northeast of Sidney, Montana, and approximately 0.75 miles east of Highway 200. The legal description of the proposed facility is the Northwest ¼ of Section 27, Township 23 North, Range 59 East, in Richland County, Montana. Equipment used at this facility includes, but is not limited to, the following: grain receiving Pit #1 (12,500 bushels per hour (bu/hr)), grain receiving Pit #2 (12,500 bu/hr), grain handling equipment (25,000 bu/hr), grain silo storage bin(s) (500,000 bu), grain loadout equipment (25,000 bu/hr), and dust control systems (baghouse).

B. Process Description

The proposed grain elevator facility is designed to receive and store grain from local farmers prior to shipment to a malt plant. The storage capacity of the facility is approximately 500,000 bushels. Typically, the facility will receive grain via truck and/or railcar. Each truck and railcar will be weighed and a sample of the inbound grain will be obtained and analyzed to ensure the grain meets quality specifications. Once the grain is approved, the trucks and/or railcars will proceed to the appropriate elevator dump pit (i.e., Pit #1 and Pit#2) and be unloaded. During unloading, particulate matter emissions from the unloading operation will be collected and routed to a baghouse to control air emissions. Once unloaded, the grain will be conveyed to the distributor where it will be delivered to the appropriate storage silo/tank. For shipment to the malt plant, the grain is removed from the storage tanks using enclosed conveyors that elevate the grain back to the distributor where the trucks and/or railcar are loaded. Particulate emissions will be controlled from the grain unloading and handling procedures using a baghouse.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (Department). Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations, or copies where appropriate.

A. ARM 17.8, Sub-Chapter 1, General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This section includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emissions of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

   BARI shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly, by telephone, whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

B. ARM 17.8, Sub-Chapter 2, Ambient Air Quality, including, but not limited to:

1. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
2. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}

BARI must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Sub-Chapter 3, Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into an outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. Under this rule, BARI shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). Subpart DD, Standards of Performance for Grain Elevators, indicates that grain terminal elevators that have a storage capacity of more than 2.5 million U.S. bushels are subject to the requirements of this subpart. BARI does not have a permanent storage capacity of 2.5 million bushels or more; therefore, NSPS Subpart DD does not apply to this facility.

D. ARM 17.8, Sub-Chapter 5, Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. BARI has submitted the appropriate permit application fee.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

   An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions which pro-rate the required fee amount.

E. ARM 17.8, Sub-Chapter 7, Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.701 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.704 General Procedures for Air Quality Preconstruction Permitting. An air quality preconstruction permit shall contain requirements and conditions applicable to both construction and subsequent use of the permitted equipment.

3. ARM 17.8.705 When Permit Required--Exclusions. This rule requires a facility to obtain an air quality permit or permit alteration if they construct, alter, or use any air contaminant sources which have the potential to emit more than 25 tons per year of any pollutant. BARI has the potential to emit greater than 25 tons per year of PM and PM_{10}; therefore, a permit is required.

4. ARM 17.8.707 Waivers. ARM 17.8.706 requires the permit application to be submitted 180 days prior to construction. The Department hereby waives this time limit.

5. ARM 17.8.710 Condition of Issuance of Permit. This rule requires that BARI demonstrate compliance with applicable rules and standards before a permit can be issued. Also, a permit may be issued with such conditions as are necessary to assure compliance with all applicable rules and standards. BARI has demonstrated compliance with applicable rules and standards as required for permit issuance.

6. ARM 17.8.715 Emission Control Requirements. BARI is required to install on the new or altered source the maximum air pollution control capability that is technically practicable and economically feasible, except that a Best Available Control Technology (BACT) shall be used. A BACT analysis was conducted for sources of particulate matter at this facility. The BACT analysis can be found in Section IV of this permit analysis.

7. ARM 17.8.716 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

8. ARM 17.8.717 Compliance with Other Statutes and Rules. This rule states that nothing in the permit shall be construed as relieving BARI of the responsibility for complying with any applicable federal or Montana statute, rule or standard, except as specifically provided in ARM 17.8.101, *et seq.*

9. ARM 17.8.720 Public Review of Permit Applications. This rule requires that BARI notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. BARI submitted an affidavit dated May 22, 2002, from *The Sidney Herald Leader*, a newspaper of general circulation in Richland County, as proof of compliance with the public notice requirement.

10. ARM 17.8.731 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

11. ARM 17.8.733 Modification of Permit. An air quality permit may be modified for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack which do not result in an increase in emissions because of those changed conditions. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.

12. ARM 17.8.734 Transfer of Permit. (1) An air quality permit may be transferred from one location to another if written notice of Intent to Transfer is sent to the Department. (2) An air quality permit may be transferred from one person to another if a written notice of Intent to Transfer, including the names of the transferor and transferee, is sent to the Department.

F. ARM 17.8, Sub-Chapter 8, Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the Federal Clean Air Act (FCAA) that it would emit, except as this sub-chapter would otherwise allow.

   This facility is not a major stationary source because it is not a listed source and does not have the potential to emit more than 250 tons per year of any air pollutant.

III. Emission Inventory

Estimates of potential emissions from the grain elevator facility near Sidney, Montana.

Air Pollutants (ton/year)						
Source	PM	PM_{10}	NO_x	VOC	CO	SO_2
Grain Unloading Pit #1	3.8	1.2	---	---	---	---
Grain Unloading Pit #2	0.7	0.2	---	---	---	---
Grain Handling	2.6	1.4	---	---	---	---
Grain Loadout	18	12.3	---	---	---	---
Total Potential Emissions	25.1	15.1	na	na	na	na

na = *not applicable*

Grain Unloading Pit #1

Maximum Annual Throughput = 14,000,000 bu/year
Approximate Product Density = 59.73 lb/bu
Approximate Process Rate = 59.73 lb/bu * 14.0 x 10^6 bu/yr * 1 ton/2000 lb = 418,110 ton/yr

PM Emissions:
Emission Factor = 0.18 lb/ton {AP-42, Table 9.9.1-1, 5/98, Straight Truck}
Estimated Control Efficiency = 90% {Baghouse-Permit Application}
Calculations: 418,110 ton/yr * 0.18 lb/ton * (1 – 0.90) * 1 ton / 2,000 lb = 3.8 ton/yr

PM_{10} Emissions:
Emission Factor = 0.059 lb/ton {AP-42, Table 9.9.1-1, 5/98, Straight Truck}
Estimated Control Efficiency = 90% {Baghouse-Permit Application}
Calculations: 418,110 ton/yr * 0.059 lb/ton * (1 – 0.90) * 1 ton / 2,000 lb = 1.2 ton/yr

Grain Unloading Pit #2

Maximum Annual Throughput = 14,000,000 bu/year
Approximate Product Density = 59.73 lb/bu
Approximate Process Rate = 59.73 lb/bu * 14.0 x 10^6 bushel/yr * 1 ton/2000 lb = 418,110 ton/yr

PM Emissions:
Emission Factor = 0.032 lb/ton {AP-42, Table 9.9.1-1, 5/98, Rail}
Estimated Control Efficiency = 90% {Baghouse-Permit Application}
Calculations: 418,110 ton/yr * 0.032 lb/ton * (1 – 0.90) * 1 ton / 2,000 lb = 0.7 ton/year

PM_{10} Emissions:
Emission Factor = 0.0078 lb/ton {AP-42, Table 9.9.1-1, 5/98, Rail}
Estimated Control Efficiency = 90% {Baghouse-Permit Application}
Calculations: 418,110 ton/yr * 0.059 lb/ton * (1 – 0.90) * 1 ton / 2,000 lb = 0.2 ton/yr

Grain Handling

Maximum Annual Throughput = 28,000,000 bu/year
Approximate Product Density = 59.73 lb/bu
Approximate Process Rate = 59.73 lb/bu * 28.0 x 10^6 bu/yr * 1 ton/2000 lb = 836,220 ton/yr

PM Emissions:
Emission Factor = 0.061 lb/ton {AP-42, Table 9.9.1-1, 5/98}
Estimated Control Efficiency = 90% {Baghouse}
Calculations: 836,220 ton/yr * 0.061 lb/ton * (1-0.90) * 1 ton / 2,000 lb = 2.6 ton/yr

PM_{10} Emissions:
Emission Factor = 0.034 lb/ton {AP-42, Table 9.9.1-1, 5/98}
Estimated Control Efficiency = 90%
Calculations: 836,220 ton/yr * 0.034 lb/ton * (1-0.90) 1 ton / 2,000 lb = 1.4 ton/yr

Grain Loadout

Maximum Annual Throughput = 14,000,000 bu/yr
Approximate Product Density = 59.73 lb/bu
Approximate Process Rate = 59.73 lb/bu * 28.0 x 10^6 bu/yr * 1 ton/2000 lb = 418,110 ton/yr

PM Emissions:
Emission Factor = 0.086 lb/ton {AP-42, Table 9.9.1-1, 5/98, Truck}
Estimated Control Efficiency = 0% {Permit Application}
Calculations: 418,110 ton/yr * 0.086 lb/ton * 1 ton / 2,000 lb = 18 ton/year

PM_{10} Emissions:
Emission Factor = 0.029 lb/ton {AP-42, Table 9.9.1-1, 5/98, Truck}
Estimated Control Efficiency = 0% {Permit Application}
Calculations: 418,110 ton/yr * 0.059 lb/ton * 1 ton / 2,000 lb = 12.3 ton/yr

IV. Best Available Control Technology Analysis

A BACT analysis is required for any new or altered source. BARI shall install on the new or altered source the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be used. The following are the options the Department has reviewed to make a BACT determination for the proposed facility.

A. Electrostatic Precipitator (ESP)

An ESP ionizes the contaminated air flowing between oppositely charged electrodes. These charged particles migrate towards the oppositely charged plates, which are eventually removed and collected at the bottom of the ESP. An ESP can handle large gas volumes and are very efficient at removing small particles with high removal efficiencies ranging from approximately 90% to 99%. While an ESP can achieve high removal efficiencies, the installation and operation costs of the ESP are considerably higher than other similar control technologies. For this reason, an ESP would not constitute BACT in this case.

B. Baghouse

Fabric filters (baghouses) are used to collect dry particles from a gas stream. As the gas stream passes through the fabric filter, the dust particles are collected and retained by the fabric. Baghouses are very efficient at removing small particles, with removal efficiencies commonly ranging from 95 to 99%. A baghouse can achieve high removal efficiencies and the installation and operation costs of a baghouse are considerably less than an ESP. Therefore, the Department determined that the operation and maintenance of a baghouse constitute BACT for this facility.

The control options selected have controls and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate air quality emissions standards.

V. Existing Air Quality and Impacts

The area surrounding the proposed facility is predominantly agricultural and rural in nature. The emissions from the proposed facility would be intermittent and seasonal in nature with generally good dispersion characteristics in the area. Therefore, in the view of the Department, the amount of controlled emissions from this facility will not cause an exceedance of any ambient air quality standard.

VI. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this permitting action. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air and Waste Management Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued For: Busch Agricultural Services, Inc.
Sidney Elevator
P.O. Box 966
Sidney, MT 59720

Air Quality Permit Number: #3201-00
Preliminary Determination Issued: 06/27/02
Department Decision Issued: 07/15/02
Final Permit: 07/31/02

1. Legal Description of Site: The proposed grain elevator would be located on a 50-acre land parcel approximately 1 mile northeast of Sidney, Montana, and approximately 0.75 miles east of Highway 200 and the former Lewis and Clark Trail. The legal description of the proposed facility would be the Northwest ¼ of Section 27, Township 23 North, Range 59 East, in Richland County, Montana.

2. Description of Project: The Department proposes to issue an air quality preconstruction permit to BARI for the construction and operation of a grain elevator. The facility would consist of equipment for unloading, storing, and loading grain. In general, storage bins would consist of a concrete workhouse approximately 65 feet in length, 55 feet in width, and 130 feet in height with a capacity of approximately 200,000 bushels (with 4 concrete silos of no more than 50,000 bushels). In addition, there would be approximately 2 steel storage bins each approximately 60 feet in diameter and 74 feet tall with individual storage capacity of approximately 151,667 bushels.

   The proposed grain elevator facility would be designed to receive and store grain from local farmers prior to shipment to a malt plant. Initially, the storage capacity of the facility would be approximately 500,000 bushels. Typically, the facility would receive grain via a truck and/or railcar. Each truck and railcar would be weighed and a sample of the inbound grain would be obtained to ensure the grain meets quality specifications. Once the grain was approved and meets quality control specifications, the trucks and/or railcars would proceed to the appropriate elevator dump pit and unloaded. Once unloaded, the grain would be conveyed to the distributor where it would be delivered to the appropriate storage silo/tank. For shipment to the malt plant, the grain would be removed from the storage tanks using enclosed conveyors that elevate the grain back to the distributor where the trucks and/or railcar would be loaded.

3. Objectives of Project: The proposed facility would receive, store, and ship grain for the area farmers. The proposed facility would provide area producers with a site for an efficient high-speed distribution of locally produced whole grains.

4. Alternatives Considered: In addition to the proposed action, the Department also considered the "no action" alternative. The "no action" alternative would deny the issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the no action" alternative to be appropriate because BARI demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

5. A listing of mitigation, stipulations, and other controls: A list of enforceable conditions, including a BACT analysis, would be included in Permit #3201-00.

6. Regulatory effects on private property: The Department considered alternatives to the conditions that would be imposed in this permit as part of the permit development. The Department determined that the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no action" alternative was discussed previously.

Potential Physical and Biological Effects							
		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			ŏ			yes
B	Water Quality, Quantity, and Distribution			ŏ			yes
C	Geology and Soil Quality, Stability, and Moisture			ŏ			yes
D	Vegetation Cover, Quantity, and Quality			ŏ			yes
E	Aesthetics			ŏ			yes
F	Air Quality			ŏ			yes
G	Unique Endangered, Fragile, or Limited Environmental Resource			ŏ			yes
H	Demands on Environmental Resource of Water, Air and Energy			ŏ			yes
I	Historical and Archaeological Sites			ŏ			yes
J	Cumulative and Secondary Impacts			ŏ			yes

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

The proposed operation of the grain elevator would have only minor impacts on the terrestrial and aquatic life and habitats where the facility would operate because it would emit a relatively small amount of air emissions, operate intermittently, and be located in an area with good air dispersion characteristics. In addition, the facility would be relatively small in size and create limited land disturbance associated with the construction phase of the project. Overall, therefore, the operation of the facility would present only minor impacts to the terrestrial and aquatic life and habitats.

B. Water Quality, Quantity, and Distribution

Although an increase in air emissions would result from the proposed grain elevator, there would be little, if any, impact on the water quality, quantity, and distribution because the facility would not discharge process effluent to any surface water drainage system, local groundwater aquifer, or alter the course or magnitude of groundwater or any surface water drainage system. There would be a septic system and drainfield located at the site. While deposition of air emissions to the surrounding area would occur, the Department determined that because of the facility's relatively small size, good area dispersion characteristics (i.e., wind speed and wind direction), and conditions placed in Permit #3201-00, the impact of the proposed project on the quality, quantity, and distribution of water would be minor.

C. Geology and Soil Quality, Stability, and Moisture

Overall, there would be minor impacts on the local geology and soil quality, stability, and moisture from the proposed project because of the small size of the facility and limited amount of construction activity that would be required such as the creation of footings, foundations, and roads. In addition, a small amount of deposition of air emissions would occur in the area of the facility; however, the Department determined that because of the air dispersion characteristics and conditions placed in Permit #3201-00, the impact of the proposed project would be minor. Therefore, the impact on the local geology and soil quality, stability, and moisture surrounding the site would be minor.

D. Vegetation Cover, Quantity, and Quality

As a result of the proposed project, there would be minor impacts on the local vegetation cover, quantity, and quality because small amounts of vegetation would be disturbed or removed during the initial construction of the proposed project. During operation, the deposition of air emissions would occur on the surrounding vegetation. However, the Department determined that because of the small size of the facility, small quantity of emissions, good air dispersion characteristics, and conditions placed in Permit #3201-00, the impact of the proposed project on the quantity and quality of the local vegetation cover would be minor.

E. Aesthetics

The proposed grain elevator would be visible and would create additional noise in the area of operation. However, because of the location and relatively small size of the facility, intermittent and seasonal operation, and conditions placed in Permit #3201-00 to control emissions (including visible emissions) from the facility, any aesthetic impact would be minor. The aesthetic effects would be minimized because the visible emissions would be limited by air quality Permit #3201-00 to less than 20% opacity. The small community of Sidney is predominantly rural and agricultural in nature, and is located about 1 mile southwest of the proposed facility. In addition, the historic Lewis and Clark Trail is located about ¾ of a mile west and the Yellowstone River is located about 2 miles to the east of the proposed facility.

F. Air Quality

The proposed grain elevator impacts would be minor to the local air quality because of the small amount of air emissions emitted, local air dispersion characteristics, and seasonal operation of the proposed facility. Air emissions from the facility would be minimized as a result of the conditions placed in Permit #3201-00 to limit opacity and particulate emissions. In addition, air pollution controls such as baghouses, enclosures, and water/chemical sprays and other pollutant suppression methods at the site would reduce air emissions from equipment operations, haul roads, and parking areas. Overall, therefore, the impact on the local air quality would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department contacted the Montana Natural Heritage Program (MNHP) in an effort to identify any species of special concern associated with the proposed site location. Search results concluded there would be 8 species of special concern in the general area of the proposed site. The species of special concern were identified as the Pallid Sturgeon, Sturgeon Chub, Townsend's Big-Eared Bat, Meadow Jumping Mouse, Pale-Spiked Lobelia, Blue Sucker, Paddlefish, and Sicklefin Chub. While these environmental resources were

found within general area of the proposed site, the MNHP search did not indicate any species of special concern located directly on site. Therefore, it would be unlikely that the Pallid Sturgeon, Sturgeon Chub, Townsend's Big-Eared Bat, Meadow Jumping Mouse, Pale-Spiked Lobelia, Blue Sucker, Paddlefish, and Sicklefin Chub would be adversely affected by the proposed project. Because of the relatively small size and minimal emissions from the proposed project and conditions placed in Permit #3201-00, any impacts to unique endangered, fragile, or limited environmental resources would be minor.

H. Demands on Environmental Resource of Water, Air, and Energy

The proposed project would have only minor impacts on water and air resources because of the small size and minimal amount of air emissions from the proposed project. As described in Section 7.F. of this EA, pollutant emissions generated from the facility would have minimal impacts on air quality in the immediate and surrounding area. The Department determined that as a result of the relatively small amount of air emissions, local air dispersion characteristics, and conditions in Permit #3201-00, the impact of the proposed project on the demands on water and air resources would be minor. The proposed project would have minor impacts on the electrical energy supply; however, the local utility company would have no difficulty in supplying the electricity. Overall, therefore, the impacts on the demands on environmental resources of water, air, and energy would be minor.

I. Historical and Archaeological Sites

In an effort to identify any historical and archaeological sites near the proposed project area, the Department contacted the Montana Historical Society - Historic Preservation Office (SHPO). According to the SHPO records, there is one previously recorded cultural historic site within the designated search locale. The historic site (24RL0230) was identified as a segment of the Northern Pacific Railway. SHPO recommended that a cultural resource inventory be conducted in order to determine whether or not sites exist and if they are impacted. Furthermore, SHPO identified one cultural resource inventory that was previously conducted in 1989 within the search area for the *Koch Hydrocarbon Company 4-inch Pipeline to 4 ANR Wells #268*. Since the proposed project would be in a relatively small area, the proposed project would have a low potential of impacting unknown or unrecorded cultural properties. Therefore, the impacts on historical archeological sites would be minor.

J. Cumulative and Secondary Impacts

Overall, the proposed grain elevator would cause minor impacts on the physical and biological environment because the facility would result in an increase in air emissions and create additional aesthetic impacts in the area. However, as a result of the relatively small size, intermittent and seasonal use, and conditions and limitations contained within Permit #3201-00, impacts from the facility would be minor.

8. The following table summarizes the potential social and economic effects of the proposed project on the human environment. The "no action" alternative was discussed previously.

Potential Social and Economic Effects							
		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores				ŏ		yes
B	Cultural Uniqueness and Diversity			ŏ			yes
C	Local and State Tax Base and Tax Revenue			ŏ			yes
D	Agricultural or Industrial Production			ŏ			yes
E	Human Health			ŏ			yes
F	Access to and Quality of Recreational and Wilderness Activities			ŏ			yes
G	Quantity and Distribution of Employment			ŏ			yes
H	Distribution of Population				ŏ		yes
I	Demands for Government Services			ŏ			yes
J	Industrial and Commercial Activity			ŏ			yes
K	Locally Adopted Environmental Plans and Goals				ŏ		yes
L	Cumulative and Secondary Impacts			ŏ			yes

SUMMARY OF COMMENTS ON POTENTIAL SOCIAL AND ECONOMIC EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The proposed grain elevator would not alter or disrupt any local lifestyles or communities (social structures or mores) in the area of proposed operation because the facility would be small in size; would operate intermittently; and would be consistent with the social structures and mores of the local area. Therefore, the existing social structures and mores would not be impacted as a result of this permitting action.

B. Cultural Uniqueness and Diversity

In the view of the Department, the proposed facility would have a minor impact on the cultural uniqueness of the proposed area of operation because the facility would be located approximately 0.75 miles east of the historic Lewis and Clark Trail and about 2 miles west of the Yellowstone River. The proposed facility would be an agricultural operation and the culture of the local area is predominantly agricultural; therefore, the proposed project would not have an effect on cultural diversity. The surrounding area would remain unchanged as result of the proposed project.

C. Local and State Tax Base and Tax Revenue

The proposed project would result in minor impacts to the local and state tax base and tax revenue because of the relatively small size of the proposed project. A total of 5 employees would be added to the local and state tax base as a result of issuing Permit #3201-00; therefore, the impacts on the local and state tax base and tax revenue would be minor. Overall, however, the proposed facility would serve a specific need and generate local revenue.

D. Agricultural or Industrial Production

The proposed project would be located on approximately 50 acres of private property; therefore, the Department would not expect that the permitted operation would significantly impact or displace agricultural production. Farmers in the area would have a local facility to

receive, store, and ship their products; thus, facility would have a minor impact on local industrial production. Overall, the impacts on the local agriculture and industrial production would be minor.

E. Human Health

The proposed project would result in minor impacts to human health because of the relatively small amount of air emissions discharged from the proposed facility, seasonal or intermittent operations, and conditions placed in the air quality Permit #3201-00. Overall, the project would comply with all applicable rules, regulations, and standards, which would be protective of human health and the environment.

F. Access to and Quality of Recreational and Wilderness Activities

The proposed grain elevator would not have an effect on the access to and quality of recreational and wilderness activities because of the location and relatively small in size of the facility. Therefore, the Department would not expect the proposed facility would significantly impact the access to and quality of recreation and wilderness activities. Emissions from the facility would be minimized as a result the facility's pollution control equipment, seasonal nature of the operation, and conditions placed in Permit #3201-00. Therefore, the associated impacts on the access to and quality of recreational and wilderness activities would be minor.

G. Quantity and Distribution of Employment

As a result of the relatively small size of the proposed operation, the quantity and distribution of employment in the area would be minor. During construction of the facility, approximately 20-30 people would be employed, and a total of approximately 5 individuals would be employed after construction. Overall, therefore, the associated impacts to the quantity and distribution of employment in the local area would be minor.

H. Distribution of Population

The proposed grain elevator would not impact the population distribution in the area because of the relatively small size of the project.

I. Demands of Government Services

Demands on government services from this facility would be minor because of the minor increase in truck traffic on existing roads in the area while the facility is operating, and the acquisition of the appropriate permits from government agencies and subsequent inspections. Overall, however, demands for government services would be minor.

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J. Industrial and Commercial Activity

The proposed grain elevator would represent only a minor increase in the industrial activity in any given area because of the small size and seasonal operating nature of the facility. Construction of the facility would result in temporary increases in the commercial activity in the area. Therefore, only minor additional industrial or commercial activity would result from the grain elevator operations.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans or goals. However, the state air quality requirements would protect the local site and the surrounding environment from impacts resulting from the operation of the proposed grain elevator.

L. Cumulative and Secondary Impacts

The proposed grain elevator would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area because of the potential increase in air emissions, increase in local traffic in the immediate area, location to unique cultural resources, and increase in employment. Increases in local traffic would have minor impacts on the traffic in the immediate area and because the source would be relatively small, only minor economic impacts to the local economy would be expected from the operation of the facility. Significant new businesses would not likely be drawn to the local area; however, a total of approximately 5 permanent jobs would be created as result of the proposed project. Minor impact on the cultural uniqueness of the area would result because the facility would be located approximately 0.75 miles east of the historic Lewis and Clark Trail and about 2 miles west of the Yellowstone River. Overall, the cumulative and secondary impacts from this project would result in a minor impact to the immediate area.

Recommendation: No EIS is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The potential effects resulting from construction and operation of the proposed facility would be minor, therefore, an EIS would not be required. Air quality Permit #3201-00 includes conditions and limitations to ensure the facility would operate in compliance with all applicable air quality rules and regulations.

Other groups or agencies contacted or that may have overlapping jurisdiction: Montana Department of Natural Resources, Montana Natural Heritage Program (MNHP), and Historic Preservation Office of the Montana Historical Society (SHPO).

Individuals or groups contributing to this EA: Montana Department of Environmental Quality, Air and Waste Management Bureau, MNHP, and SHPO.

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